



Launch Mission Execution Forecast



Mission: Falcon 9 Nilesat-301

Issued: 7 June 2022 / 0830L (1230Z)

Valid: 8 June 2022 / 1703 – 1932L (2103 – 2332Z)

Forecast Discussion: A light pressure gradient across the state will allow both the Gulf and Atlantic sea breezes to develop and move inland during the early afternoon over the next few days, serving as the primary driver for shower and thunderstorm development. Each day the potential for showers and storms will generally be highest in the early afternoon across the Spaceport, shifting to the interior of the peninsula later in the afternoon. However, there will be a threat for a few storms to drift back towards the east coast in the evening with westerly steering flow. The primary concerns for both the primary and secondary launch windows Wednesday and Thursday afternoons will be cumulus clouds from any nearby activity as well as anvil clouds from inland storms.

		Probability of Violating Weather Constraints ¹				
Launch Day	40%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
	Weather Conditions				Additional Risk Criteria ²	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
		Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity: 83°F / 72%	Cumulus	Scattered	3,500	10,000	Booster Recovery Weather: Low	
Liftoff Winds (200'): 100° 10 - 15 mph	Cirrus	Scattered	35,000	40,000	Solar Activity: Low	
		Probability of Violating Weather Constraints				
24-Hour Delay	30%	Primary Concerns: Cumulus Cloud Rule, Anvil Cloud Rules				
	Weather Conditions				Additional Risk Criteria	
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low	
		Type	Coverage	Base (ft)	Tops (ft)	
Temp/Humidity: 85°F / 79%	Cumulus	Scattered	3,500	8,000	Booster Recovery Weather: Low	
Liftoff Winds (200'): 140° 10 - 15 mph	Cirrus	Scattered	35,000	40,000	Solar Activity: Low	
Notes	<ol style="list-style-type: none"> The Probability of Violation (PoV) is the chance of a local safety or customer constraint violation occurring anytime during the launch window. Additional Risk Criteria, which are not included in the PoV, are mission-specific constraints that may not include all phenomena within each risk factor. 					
	See https://www.patrick.spaceforce.mil/Portals/14/Weather/LaunchFAQ.pdf for more information					
Next Forecast Will Be Issued		8 June 2022				